Process...EA Review of Project Milestones...Criteria

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1. Review Criteria

1.1. Milestone 0 EA Review - Project Initiation Approval

Milestone 0 is intended to have the Project Manager (PM) identify a basic business requirement that would justify project initiation approval. It does not presume any significant prior investment in analysis (either business or technical), concept or requirements definition or design; rather, it seeks answers to these most basic questions even before committing to that level of investment.

From the perspective of the One-VA EA, at Milestone-0, PM(s) are expected to focus on the business objectives and veteran service objectives that are relevant to the proposed new project. These business objectives are represented in Zachman Row-1 and Row-2 within the EA Repository.

Milestone-0 EA Compliance Review Criteria		
Milestone Requirement	Guidance for Preparer	Guidance for Reviewer
Identify the specific Business Functions and Business Processes that the proposed project will address either in whole or in part.	Identify the business function/process elements that are affected in the Milestone-0 business case narrative. The current array of VA business functions and sub-functions is provided with the EA Repository (in Zachman Row-1, Col-2) and the corresponding VA business processes are available in Zachman Row-2, Col-2 (of the Repository.	Assure that the Milestone-0 business case clearly identifies the affected business areas, business lines and Functions.
Identify the specific external and internal drivers to be addressed either in whole or in part by the proposed project	What is the problem to be solved? How does the proposal address the goals and objectives of the Secretary's Strategic Plan, the Presidents Management Agenda or Specific mandates in Legislation, Court Decisions, Executive Order or any other external authority?	Assure that business and veteran service objectives are clearly identified.

	How does the business case improve service to Veterans? Refer to the Repository cells in Zachman Row-1, Col-6 identifies external drivers such as federal legislation, and refer to the Repository cell at Zachman Row-2 Col-6 to identify internally-developed VA policies and plans.	
Identify the primary locations at which the proposed project will be installed and used	For discrete locations (such as a "National Contact Center" or "National Eligibility Center") identify the general location. For general categories of VA facilities with many locations (such as "All Regional Offices") Identify the group of facilities by the group name. The repository cell at Zachman Row-2, Col-3 provides a comprehensive list of VA facilities.	Assure that the business case narrative provides a clear indication of the impacted VA and related business-partner facilities and locations.
Identify the Stakeholders and organizational entities that will be directly affected by the proposed project	The current model of VA stakeholders is provided with the EA Repository (in Zachman Row-1, Col-4) and the corresponding VA organization roles are modeled in Zachman Row-2, Col-4 (of the Repository. Use this information to assist in describing the impact of the proposed project on all stakeholder groups.	Verify that all major stakeholder interests have been addressed and within the Milestone-0 presentation.
Identify the major business events that will be directly affected by the proposed project	Use the EA Repository (Zachman Role-1, Col-5 for VA external events and schedules; and Zachman Row-2 Col-5 for VA-internal events & schedules, to assist in identifying this initiatives impact on VA's business schedules and events.	Verify that all business schedule impacts have been addressed.
Identify VA products and services	Repository Zachman Row-1,	Verify that impacted products and

that will be altered/improved as a result of this proposed project	Col-1 describes VA's Deliverables and Resources; and Repository Zachman Row-2, Col-1 provides detailed product and service specifications. Describe the impact of this initiative upon VA's products and services and upon the resources that VA will utilize to produce these products and services.	services have been addressed.
Identify internal process efficiency improvements that will be expected from this project	Describe if and how this initiative will improve VA process efficiency. Will the initiative, correct a deficiency or eliminate a material weakness.	Assure that the objectives of the initiative are aligned with the business and veteran-service objectives of VA, and that these relationships have been captured in the MILESTONE-0 discussion.

Upon completion of the EA Milestone-0 review the OEAM/EAS staff will record the new initiative within the To-Be Target Architecture Project Inventory as a "Proposed Project at Milestone-0" and will create a project summary narrative, in the format consistent with the EA To-Be (Target) Architecture project summary section.

OEAM/EAS will also use the business requirements addressed within the initiative to augment the To-Be-State of the Zachman Row-3 portion of the EA Repository.

1.2. Milestone I EA Review - Prototype Development Approval

The Milestone I review is intended to provide approval for a general project design solution and to provide approval for the commitment of resources to develop a pilot or prototype effort, if one is appropriate. Approval at Milestone-I also provides permission, for the project PM, to develop and submit an OMB Ex-300 budget request. Before the Milestone-I review, Project managers will have completed the project's business case analysis including an analysis of alternatives; they will have performed a cost benefit analysis and will have assessed the project's approximate return on Investment.

From the perspective of the One-VA EA, the Milestone-I discussion should focus on a broadly sketched project design solution with a Concept of Operations diagram and narrative, a discussion of how this solution bests supports the project objectives, a Rough Order of Magnitude (ROM) estimate of project cost, schedule, and deliverables; and an estimate of project

utilization of sharable components and sharable, re-used data.

The OEAM Enterprise Architecture Service (EAS) staff and Data Architecture Service (DAS) staff will assist the projects sponsor, PM and development team in identifying potential sharable components and re-usable data.

In general terms, the project-planning, that will have occurred prior to Milestone-I, impacts the EA by refining project requirements at Zachman Row-3 within the EA Repository and by establishing a general design solution at Zachman Row-4 within the EA Repository. The OEAM/EAS staff will augment these repository areas based upon the Milestone-I review and the project manager's information.

Milestone Requirement	Guidance for Preparer	Guidance for Reviewer
Provide the projects concept of operations diagram, with a supporting narrative.	Refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-6 (To-Be State).	Verify that the revised ConOps is consistent with other project plans at Milestone-I
Identify the projects technical approach (technology selection). It must conform to the technical architecture permitted within the VA TRM	Refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-2 (To-Be-State).	Verify that the revised technical approach is consistent with other the EA TRM
Identify existing/new information collections required by the project, from/for the Corporate Information Model (CIM). Will the data collection be created, read, updated or deleted by this design solution?	Refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-1(To-Be-State).	Verify that the use of the cited information collections are consistent with the CIM and the SRM registry within the To-Be Architecture discussion within the EA website "Document" Tab.
Identify VA business processes that will interface with, or be altered by, the deployment of this initiative	Refer to the enterprise business process definition within Zachman Row-2, Col-2(As-Is-State). Also refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-2(To-Be-State).	Verify the appropriate use of VA and FEA Sharable Components through the VA SRM Registry.

Identify sharable service components selected for use within the project	Refer to the VA SRM Registry and the VA SRM mapping model within the FEA-PMO mapping topic within the Process Tab of the EA website.	Verify the appropriate use of sharable components within the project.
Identify sharable data resources selected for re-use within this project	Refer to the VA SRM Registry and the VA SRM mapping model within the FEA-PMO mapping topic within the Process Tab of the EA website. Also refer to the Corporate Information Model (CIM) within the "Documentation" Tab of the EA website.	Verify that sharable data resources have been properly exploited.
Provide a general design solution (or logical architecture) diagram of the proposed design solution with supporting narrative. Include descriptions of proposed interfaces to and interoperability with existing systems.	Refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-2 (To-Be-State). Also refer to the "To-Be (Target) Architecture discussion in the "Analysis" Tab of the EA website.	Verify the accuracy and completeness of the described interfaces with the EA.
How will the development of this design solution be managed, and staffed? What are the projected staffing requirements of the proposed deployed system? Provide soft copies of the projects Scope Management Plan, Project Charter, and Project Management Plan. Provide a soft copy of the project's requirements report.	Refer to the baseline project governance definition, established at Milestone-0 within Zachman Row-3, Col-6 (To-Be-State).	Assure that the required project management documents are complete and that the functional requirements are consistent with the proposed design solution.
Identify the Stakeholder Groups and Organizational units that will be effected by this project, and how? Provide a ROM estimate of the types of training to be required and the number of people to be trained.	Refer to the baseline project stakeholder impact definition, established at Milestone-0 within Zachman Row-3, Col-4 (To-Be-State).	Verify that the natural stakeholder groups, for this initiative have been addressed.

Describe the project design solution's proposed schedule, milestones and events. Describe how this project may alter VA business schedules and events.	Refer to the baseline project schedule and event impact definition, established at Milestone-0 within Zachman Row-3, Col-5 (To-Be-State).	Assure that scheduling issues have been addressed.
Identify the locations that will be impacted by either the project development or by the resulting deployed system	Refer to the baseline project topology definition, established at Milestone-0 within Zachman Row-3, Col-3 (To-Be-State).	Verify the referenced project locations within the Milestone review are consistent with the EA.
What is the project-design-solution's shared and dedicated infrastructure requirements. What are the projects projected scalability requirements over time. What is the projected availability requirement and criticality of the developed system?	Refer to the VA SRM Registry and the VA SRM mapping model within the FEA-PMO mapping topic within the Process Tab of the EA website.	Assure that infrastructure scalability and availability have been addressed.
Develop an estimated traffic flow, user count, user access frequency, user location distribution and usage frequency pattern for each identified transaction.	Information derived from internal project design team resources.	Assure that the required capacity planning has been made available for use in network and shared resource provisioning.
Estimate which network protocols, network ports and standard network services will be required by the implemented project.	Information derived from internal project design team resources.	Assure that the required network configuration and security information is available for use by network management.
How will this proposed design solution further the achievement of VA's business objectives and Veteran service objectives? Will this design solution correct existing deficiencies in VA business performance; will the design solution cure a material weakness in VA service delivery? If so explain.	Refer to the enterprise external mandate definition, at Repository Zachman Row-1, Col-6 (As-Is State) and to enterprise internal governance definition, at Repository Zachman Row-2, Col-6 (As-Is State).	Verify the legislative mandate and regulatory mandate relationships to the cited VA business functions.

How will this design solution support and deliver the performance improvements identified at Milestone-0? How will these performance enhancements be measured (directly or indirectly, and with what metric)?	Refer to the baseline project governance and motivation definition, established at Milestone-0 within Zachman Row-3, Col-6 (To-Be-State).	Identify the strategy and metrics that are claimed to support performance improvement.
If a prototype is proposed, describe the scope and complexity of the prototype environment	Refer to the baseline project prototype definition, established at Milestone-0 within Zachman Row-3, Col-2 (To-Be-State).	Assure that the prototype design and is available for documentation within the EA.

Upon completion of the EA Milestone-I review and the subsequent BNIB approval, the OEAM/EAS staff will augment the project summary record for this project, within the To-Be Target Architecture Project Inventory. The project will be listed as an "Approved Project at Milestone-I".

The OEAM/EAS staff will migrate the project's EA repository entry from the "To-Be State", to the "Portfolio State". OEAM/EAS will augment the project requirement definition and project governance definition within Zachman Row-3, and will introduce the project design solution into Zachman Row-4, based upon the Milestone-I presentation and the Project Manager's information.

1.3. Milestone II EA Review - System Development Approval

At Milestone II, the project's design solution is finalized in preparation for full system or process development. Between the Milestone-I approval and the Milestone-II review, project development is focused on detailed requirements determination and detailed solution design. During this stage a system prototype may have been developed and tested, as well.

The enterprise architecture review at Milestone-II is focused on finalizing project functional requirements within Repository Zachman Row-3 and upon finalizing design-solution details for inclusion within Repository Zachman Row-4.

Milestone-II EA Compliance Review Criteria		
Milestone Requirement	Guidance for Preparer	Guidance for Reviewer

Finalize the projects concept of operations diagram, and its supporting narrative.	Refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-6 (To-Be State).	Verify that the final ConOps is consistent with other project plans at Milestone-I
Finalize the projects technical approach (technology selection). Does it still conform to the technical architecture within the VA TRM	Refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-2 (To-Be-State).	Verify that the final technical approach is consistent with other the EA TRM
Finalize the project design solution's linkage to information collections in the Corporate Information Model (CIM). Finalize how the data collection be created, read, updated, or deleted by this design solution?	Refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-1(To-Be-State).	Verify that the final set of cited information collections are consistent with the CIM and the SRM registry within the To-Be Architecture discussion within the EA website "Document" Tab.
Finalize the projects linkage to VA business processes that will interface with or be altered by the deployment of this initiative	Refer to the enterprise business process definition within Zachman Row-2, Col-2(As-Is-State). Also refer to the baseline project definition, established at Milestone-0 within Zachman Row-3, Col-2(To-Be-State).	Verify the final configuration of VA and FEA Sharable Components through the VA SRM Registry.
Finalize the selection of sharable service components selected for use within the project	Refer to the VA SRM Registry and the VA SRM mapping model within the FEA-PMO mapping topic within the Process Tab of the EA website.	Verify the finalized set of sharable components within the project against the VA SRM registry.
Finalize the selection of sharable data resources selected for re-use within this project	Refer to the VA SRM Registry and the VA SRM mapping model within the FEA-PMO mapping topic within the Process Tab of the EA website. Also refer to the Corporate Information Model (CIM) within the "Documentation" Tab of the EA website.	Verify the final set of sharable data resources against the CIM.
Finalize the project's design	Refer to the baseline project	Verify the accuracy and

solution (logical architecture diagram and supporting text). Update descriptions of proposed interfaces and interoperability with existing systems.	definition, established at Milestone-0 within Zachman Row-3, Col-2 (To-Be-State). Also refer to the "To-Be (Target) Architecture discussion in the "Analysis" Tab of the EA website	completeness of the final set of system interfaces with the EA.
Finalize the project management methodology and staffing. Provide updated soft copies of the projects Scope Management Plan, Project Charter, and Project Management Plan and functional requirements report.	Refer to the baseline project governance definition, established at Milestone-0 within Zachman Row-3, Col-6 (To-Be-State).	Assure that the finalized project management documents are complete and that the finalized functional requirements are consistent with the proposed design solution.
Refine the project's concept of which Stakeholder Groups and Organizational units will be effected by this project, and how? Finalize of the types of training to be required and the number of people to be trained.	Refer to the baseline project stakeholder impact definition, established at Milestone-0 within Zachman Row-3, Col-4 (To-Be-State).	Verify that the revised natural stakeholder groups, for this initiative have been addressed.
Finalize the project design solution's proposed schedule, milestones and events. Refine the notion of how this project will alter VA business schedules and events.	Refer to the baseline project schedule and event impact definition, established at Milestone-0 within Zachman Row-3, Col-5 (To-Be-State).	Assure that the revised scheduling issues have been addressed.
Finalize the locations that will be impacted by either the project development or by the resulting deployed system	Refer to the baseline project topology definition, established at Milestone-0 within Zachman Row-3, Col-3 (To-Be-State).	Verify the revised project locations within the Milestone review are consistent with the EA.
Finalize the project-design-solution's shared and dedicated infrastructure requirements. Finalize the project's scalability requirements over time. Finalize the project's availability requirement and the criticality of the developed	Refer to the VA SRM Registry and the VA SRM mapping model within the FEA-PMO mapping topic within the Process Tab of the EA website.	Assure that the revisions to infrastructure scalability and availability have been addressed.

system?		
Finalize the project design solution's estimated traffic flow, user count, user access frequency, user location distribution, and usage frequency pattern for each identified transaction.	Information derived from internal project design team resources.	Assure that the revised capacity planning has been made available for use in network and shared resource provisioning.
Finalize the project's production requirement for network protocols, network ports and standard network services.	Information derived from internal project design team resources.	Assure that the revised network configuration and security information is available for use by network management.
Finalize how the proposed design solution will further the achievement of VA's business objectives and Veteran service objectives? Finalize how this design solution will correct existing deficiencies in VA business performance; and if the design solution cure a material weakness in VA service delivery?	Refer to the enterprise external mandate definition, at Repository Zachman Row-1, Col-6 (As-Is State) and to enterprise internal governance definition, at Repository Zachman Row-2, Col-6 (As-Is State).	Verify the finalized legislative mandate and regulatory mandate relationships to the cited VA business functions.
Finalize the assessment of how design solution will support and deliver the performance improvements identified at Milestone-0 & Milestone-I? Update how these performance enhancements will be measured (directly or indirectly, and with what metric)?	Refer to the baseline project governance and motivation definition, established at Milestone-0 within Zachman Row-3, Col-6 (To-Be-State).	Identify the finalized strategy and metrics that are claimed to support performance improvement.
If a prototype was performed, provide results of and reactions to the prototype.	Refer to the baseline project prototype definition, established at Milestone-0 within Zachman Row-3, Col-2 (To-Be-State).	Assure that the finalized prototype specification and production results are available for documentation within the EA.

Upon completion of the EA Milestone-II review and the subsequent BNIB approval, the OEAM/EAS staff will augment the project summary record for this project, within the To-Be

Target Architecture Project Inventory. The project will be listed as an "Approved Project at Milestone-II".

The OEAM/EAS staff will augment the project's EA repository entry, at the "Portfolio State". OEAM/EAS will augment the project requirement definition and project governance definition within Zachman Row-3, and will augment the project design solution information within Zachman Row-4, based upon the Milestone-II presentation and the Project Manager's information.

1.4. Milestone III EA Review - System Deployment Approval

Milestone III is intended to assure that the project has met all of its user acceptance requirements, and to assure that the project has completed all pre-deployment planning and preparation requirements. Depending on the nature of a specific project, this milestone can also be split into a Milestone IIIa for approval of limited initial deployment, and a Milestone IIIb for full, enterprise wide deployment. Key issues to be addressed are whether the project has adequately demonstrated through test that the system meets its functional and performance requirements (often referred to as effectiveness), and whether the system is adequately supported both from a human factor, documentation, spares and training perspective (often referred to as suitability).

At Milestone III, from a One-VA EA perspective, to gain approval for deployment PMs must have completed the "Builder's View (Zachman Row 5)" which establishes the "As-Built" specification of the project. This as-built specification is the detailed description of the project and system that Configuration Managers will use for change control and version management purposes throughout the system lifecycle. PMs must demonstrate compliance with applicable portions of the TRM and Standards Profile. They must have completed cyber security certification and accreditation. They must also have defined the performance metrics to be collected during in-service operation of the information system as the basis for evaluating goal achievement in row 6 of the Framework. This should specifically include not only data to validate in service satisfaction of performance requirements, but also assess actual achieved ROI for comparison with projections made early in the project life cycle and updated as the project executed. Subsequently during Milestone IV post implementation reviews PMs are expected to report on the actual performance of the information systems in these areas.

Milestone-III EA Compliance Review Criteria			
Milestone Requirement	Guidance for Preparer	Guidance for Reviewer	
Provide As-Build documentation describing the completed and tested version of the system and	Refer to the projects Configuration Management Plan; to EA Repository Row-4, Col-6 for	Assure that the As-Built system description and configuration profile are complete and available	

certify that this version has been accepted for production deployment by the project's sponsor. Provide As-Built documentation that identifies all the delivered components of the system and their installed locations (i.e. module/program names with file, directory, drive and server designations)	governance of the system design solution; and to Repository Row-5 Col-6 for configuration governance of the As-Built system.	to the EA
Identify and provide all As-Built system and user documentation including maintenance schedule, backup schedule, help desk procedures, system management guides, and user guides.	Refer to the projects Implementation Plan; and to Repository Row-5 Col-6 for governance of the As-Built system.	Assure that the As-Built system documentation is complete and available to the EA
Identify and provide complete deployment plans and schedules, identifying which pre-deployment activities have been completed, and which sites have been selected for hosting the production system.	Refer to the projects Deployment Plan; and to Repository Row-5 Col-6 for governance of the As-Built system.	Assure that system deployment planning is complete and available to the EA
Identify the capacity estimates for system workload and indicate how these have resulted in augmented shared resource provisioning.	Information derived from internal project design team resources.	Assure that the As-Built capacity planning factors have been made available for use in network and shared resource provisioning.
Identify the performance requirements for Network Availability, maximum acceptable network latency, maximum acceptable packet loss, maximum network jitter, and network quality of service.	Information derived from internal project design team resources.	Assure that the As-Built network quality specifications have been made available for use in network management.
Provide softcopy versions of the Service Level Agreements, negotiated between the project decision authority and the VA-WAN management authority, the host data center management authority and the Cyber security	Information derived from internal project design team resources.	Assure that the required system management agreements have been made available to the EA.

Decision Authority, establishing the acceptable service levels for shared resources and centralized services.		
Identify the metrics that will be used to measure client service enhancements, cost and efficiency enhancements and improved functionality. Identify the correlation between the measured "metric" value and the related service/efficiency improvement value. Identify the initial (pre-deployment) value of the metric and the (post-deployment) target value.	Information derived from internal project design team resources.	Assure that the project's metric measurement strategy is available to the EA.
Identify the Configuration Manager who is responsible for version control & system component/configuration integrity. Identify the configuration management tool (that was used to manage this process) and how it may be accessed.	Information derived from internal project design team resources.	Assure that the project's configuration management process has been made available to the EA.

Upon completion of the EA Milestone-III review and the subsequent BNIB approval, the OEAM/EAS staff will augment the project summary record for this project, within the To-Be Target Architecture Project Inventory. The project will be listed as an "Approved Project at Milestone-III".

The OEAM/EAS staff will augment the project's EA repository entry, at the "Portfolio State". OEAM/EAS will augment the project As-Built definition, Project Deployment Planning definition and Configuration Management definition within the EA Repository Zachman Row-5, based upon the Milestone-III presentation and the Project Manager's information.

1.5. Milestone IV: EA Review - Post Implementation Review

Milestone IV, Post Implementation Review, is intended to assess in service effectiveness and

suitability of an IT system. This includes assessment of the success in meeting the fielding plans, meeting performance parameters, cost, schedule, security, and projected ROI. It also includes assessment of the adequacy of training, documentation, and maintenance support for the IT system, as well as assessment of whether any changes are required to the IT system.

From a One-VA EA perspective this provides an important feedback mechanism to also assess not only whether the system continues to be in compliance with the One-VA EA, but also whether in service experience indicated a need for change in the EA itself.

Milestone Requirement	Guidance for Preparer	Guidance for Reviewer
Provide deployed system configuration and location information for each host site	Refer to EA repository Zachman Row-6 Col-3 for deployed system specification.	Verify that the deployed system specification has been provided.
Identify host site POC(s), supporting helpdesk POC(s) Backup/COOP site POC(s)	Information derived from the system deployment process.	Verify that production system management information has been provided.
Provide Deployment Lessons Learned and early production user reactions, and early production helpdesk call statistics	Information derived from system production.	Verify that the early production experience has been documented.
Collect/Measure production data values for the performance metrics identified at Milestone three. Use the correlation coefficient (defined at milestone 3) to compute the performance/service/cost improvement associated with this change in measured values. Report all of the measured statistics with their associated assumed improvement values. Develop and report lessons learned on the performance metric management process.	Information derived from system production.	Verify that the process improvement measurements have been read and interpreted.
Are the network performance requirements fully met? Are the	Information derived from system production.	Verify that the network provisioning SLA is in force.

projects scalability requirements being satisfied on schedule?		
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Upon completion of the EA Milestone-IV review and the subsequent BNIB approval, the OEAM/EAS staff will augment the project summary record for this project, within the To-Be (Target) Architecture Project Inventory to indicate that the project has been successfully deployed. The project will be listed as an "Approved Project in production at Milestone-IV".

The OEAM/EAS staff will augment the project's EA repository entry, at the "As-Is State". OEAM/EAS will augment the project Operating (Fully Deployed and Functioning) Enterprise within the EA Repository Zachman Row-6, based upon the Milestone-IV presentation and the Project Manager's information.